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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/557,612  | 11/22/2005  | Volker Breuer        | 1454.1650           | 4518             |
| 7590 07/05/2007<br>Staas & Halsey                       |             |                      | EXAMINER            |                  |
| Suite 700 1201 New York Avenue N W Washington, DC 20005 |             |                      | HU, RUI MENG        |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
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|   |             |                      | 07/05/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|---|---|--|--|--|--|--|
| Office Action Summary   |   | Application No.  | Applicant(s)   |  |  |  |
|   |   | 10/557,612   | BREUER ET AL.  |  |  |  |
|   |   | Examiner   | Art Unit   |  |  |  |
|   |   | RuiMeng Hu   | 2618   |  |  |  |
| The MAILIN Period for Reply   | G DATE of this communication app  | ears on the cover sheet with   | the correspondence address   |  |  |  |
| WHICHEVER IS Le - Extensions of time may after SIX (6) MONTHS f - If NO period for reply is - Failure to reply within the Any reply received by the   | TATUTORY PERIOD FOR REPLY ONGER, FROM THE MAILING DA be available under the provisions of 37 CFR 1.13 rom the mailing date of this communication. specified above, the maximum statutory period we set or extended period for reply will, by statute, e Office later than three months after the mailing stment. See 37 CFR 1.704(b). | TE OF THIS COMMUNICA<br>6(a). In no event, however, may a repli<br>ill apply and will expire SIX (6) MONTH<br>cause the application to become ABAN | ATION.  y be timely filed  S from the mailing date of this communication.  IDONED (35 U.S.C. § 133). |  |  |  |
| Status  |   |  |  |  |  |  |
| 1) Responsive   | to communication(s) filed on 22 No  | ovember 2005.  |  |  |  |  |
| 2a) ☐ This action is  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |  |  |  |  |  |
| •   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |  |  |  |  |
| closed in acc   | cordance with the practice under <i>E</i>   | x parte Quayle, 1935 C.D. 1  | 11, 453 O.G. 213.  |  |  |  |
| Disposition of Claims   | 3   |  |  |  |  |  |
| 4a) Of the ab 5) ☐ Claim(s) 6) ☒ Claim(s) <u>13-</u> 7) ☒ Claim(s) <u>21 a</u>  | 28 is/are pending in the application ove claim(s) is/are withdraw is/are allowed. 20 and 23-28 is/are rejected. and 22 is/are objected to are subject to restriction and/or   | n from consideration.  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |
| 10) The drawing( Applicant may Replacement  | tion is objected to by the Examiners) filed on is/are: a) accept not request that any objection to the orderwing sheet(s) including the corrective lectaration is objected to by the Ex   | epted or b) objected to by<br>drawing(s) be held in abeyance<br>on is required if the drawing(s)   | e. See 37 CFR 1.85(a).<br>is objected to. See 37 CFR 1.121(d).                                       |  |  |  |
| Priority under 35 U.S   | .C. § 119   |  |  |  |  |  |
| 12) ⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ⊠ All b) □ Some * c) □ None of:  1. ☑ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |   |  |  |  |  |  |
| Attachment(s)  1) Notice of References 2) Notice of Draftsperso 3) Information Disclosur Paper No(s)/Mail Date  | n's Patent Drawing Review (PTO-948)<br>e Statement(s) (PTO/SB/08)   |  | Mail Date<br>rmal Patent Application   |  |  |  |

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#### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

2. The information disclosure statement submitted on 11/22/2005 has been considered by the Examiner and made of record in the application file.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 13-15, 23-24, 26-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Hamabe (US PGPUB 2002/0119798).

Consider **claim 13**, Hamabe clearly discloses a method for operating a mobile radio system (Abstract) in which the signals to be transmitted to subscriber stations are amplified in a power amplifier (figure 7, amplifier 19, paragraph 51), comprising: detecting a measure of the working load of the power amplifier (paragraph 52); and

transmitting the measure of the working load to a central control unit of the mobile radio system (paragraph 52).

Consider claim 14 as applied to claim 13, Hamabe clearly discloses wherein the power amplifier is located in a radio cell of the mobile radio system (located in a base station, figure 7), and wherein the central control unit is located outside the radio cell (RNC could be located outside the radio cell).

Consider **claim 15** as applied to claim **14**, Hamabe clearly discloses wherein the measure of the working load of the power amplifier is dependent both on an output power currently made available by the power amplifier and on a maximum admissible output power of the power amplifier (paragraph 52, figures 3-4).

Consider **claim 23**, Hamabe clearly disclose a mobile radio system having a central control unit (RNC) and subscriber stations (mobile stations), comprising: at least one power amplifier (figure 7, amplifier 19) amplifying signals to be transmitted to the subscriber stations; a detection unit (controller 14) detecting a measure for the working load of at least one the power amplifier; and a transmission unit (TX 20) transmitting the measure to the central control unit (RNC) of the mobile radio system (paragraphs 51-52, abstract).

Consider claim 24 as applied to claim 23, Hamabe clearly disclose wherein the measure of the working load of said at least one power amplifier is dependent both on an output power currently made available by said at least one power amplifier and on a maximum admissible output power of said at least one power amplifier (paragraph 52, figures 3-4).

Consider **claim 26**, Hamabe clearly disclose a base station (figure 7) for a mobile radio system having a central control unit (RNC) and subscriber stations (mobile stations), comprising: at least one power amplifier (figure 7, amplifier 19) amplifying signals to be transmitted to the subscriber stations; a detection unit (figure 7, controller 14) detecting a measure for the working load of the at least one power amplifier; and a transmission unit transmitting the measure to the central control unit of the mobile radio system (paragraphs 51-52, abstract).

Consider claim 27 as applied to claim 26, Hamabe clearly disclose wherein the measure of the working load of said at least one power amplifier is dependent both on an output power currently made available by said at least one power amplifier and on a maximum admissible output power of said at least one power amplifier (paragraph 52, figures 3-4).

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

 Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 16-20, 25, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamabe (US PGPUB 2002/0119798) in view of Hottinen et al. (US Patent 7058363).

Consider **claim 16** as applied to claim **15**, Hamabe clearly discloses wherein said detecting detects at least one measure of the working load of the power amplifiers (paragraph 52).

However Hamabe fails to disclose wherein a plurality of power amplifiers are used for amplifying the signals to be transmitted to the subscriber stations.

In the same field of endeavor, Hottinen et al. clearly disclose wherein a plurality of power amplifiers are used for amplifying the signals to be transmitted to the subscriber stations (figure 2a, column 12 lines 30-44).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Hottinen et al. into the art of Hamabe as to include a plurality of power amplifiers as an alternative.

Consider claim 17 as applied to claim 16, Hamabe as modified by Hottinen et al. clearly discloses wherein the measure of the working load of each of the power amplifiers is detected (Hottinen et al. disclose loading the amplifiers as evenly as possible, thus the working load of each of the power amplifiers should be detected as to keep transmission power constant).

Consider claim 18 as applied to claim 17, Hamabe as modified by Hottinen et al. clearly discloses wherein said detecting determines the measure of the working load of the power amplifiers having a largest value, and wherein said transmitting sends the measure with the largest value to the central control unit (as detecting transmission power at maximum level, figure 3).

Consider **claim 19** as applied to claim 18, Hamabe as modified by Hottinen et al. clearly discloses further comprising detecting a measure of the working load of a radio cell in which the power amplifiers are located, in addition to the measure of the working load of the power amplifiers, and transmitting the measure of the working load of the radio cell to the central control unit (paragraphs 51-52).

Consider claim 20 as applied to claim 19, Hamabe as modified by Hottinen et al. clearly discloses wherein the measure of the working load of the radio cell is dependent on both a sum of the output powers currently made available by all power

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amplifiers of the radio cell, and also on a maximum admissible sum of the output powers of the power amplifiers (abstract, a sum of transmission powers for individual channels for individual mobile stations).

Consider claim 25 as applied to claim 24, Hamabe clearly discloses wherein said detection unit detects at least one measure of the working load of the power amplifiers (paragraph 52).

However Hamabe fails to disclose wherein said at least one power amplifier includes a plurality of power amplifiers amplifying the signals to be transmitted to the subscriber stations.

In the same field of endeavor, Hottinen et al. clearly disclose wherein a plurality of power amplifiers amplifying the signals to be transmitted to the subscriber stations (figure 2a, column 12 lines 30-44).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Hottinen et al. into the art of Hamabe as to include a plurality of power amplifiers as an alternative.

Consider claim 28 as applied to claim 27, Hamabe clearly disclose wherein said detection unit detects at least one measure of the working load of the power amplifiers (paragraph 52).

However Hamabe fails to disclose wherein said at least one power amplifier includes a plurality of power amplifiers amplifying the signals to be transmitted to the subscriber stations.

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In the same field of endeavor, Hottinen et al. clearly disclose wherein a plurality of power amplifiers amplifying the signals to be transmitted to the subscriber stations (figure 2a, column 12 lines 30-44).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Hottinen et al. into the art of Hamabe as to include a plurality of power amplifiers as an alternative.

### Allowable Subject Matter

8. Claims 21-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Consider claim 21 as applied to claim 20, the best prior art of record found during the examination of the present application, Hamabe (US PGPUB 2002/0119798) in view of Hottinen et al. (US Patent 7058363) fails to specifically disclose wherein only one of said transmitting of the measure of the working load of the at least one of the power amplifiers to the central control unit and said transmitting of the measure of the working load of the radio cell to the central control unit is performed each time said determining determines which has the greater value.

Hamabe as modified by Hottinen et al. discloses the measure of the working load of at least one of the power amplifiers (paragraphs 51-52) and the measure of the working load of the radio cell (the maximum transmission power) has a greater value.

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The sum of transmission powers for all channels for transmissions from a base station to mobile stations is controlled to constant maximum transmission power at all time.

These teachings clearly differ from the claimed invention; therefore, claims 21-22 of the present application are considered novel and non-obvious over the prior art and, consequently, are allowed.

#### Conclusion

Any response to this Office Action should be faxed to (571) 273-8300 or mailed

to:

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Hand-delivered responses should be brought to

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RuiMeng Hu whose telephone number is 571-270-1105. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RuiMeng Hu R.H./rh June 18, 2007

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